STANDARD FORM NO. 64 CALIFORNIA FOREST AND RANGE EXPERIMENT STATION, BERKELEY 1, CALIFORNIA

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TO : R. T. BINGHAM, Forester
Inland Empire Research Center

DATE: March 28, 1958

FROM : R. V. BEGA, Plant Pathologist

SUBJECT: RZ-CAL, INQUIRIES, Information

MAR 31 1958

Enclosed is a copy of the abstract on the use of detached ribes and pine leaves that appeared in Phytopath. I am preparing a more detailed article which I hope will be published some time this year. This same method is now being used in mistletoe studies and by the entomologists.

All were glad to receive your greetings and send theirs.

Robert V. Bega

Enclosure

ROBERT V. BEGAR. I BINGHAM 1957

The use of detached ribes and pine leaves in studies with Cronartium ribicola. BEGA, ROBERT V. Detached leaves of both ribes and pine species are being used in studies of the effect of microclimate on the fungus Cronartium ribicola and the disease caused by it. Either single leaves or fascicles of needles or small branches bearing several fascicles are used. Ribes leaves have been kept alive up to 45 days in Petri dishes containing moist sand covered by blotter paper through which the petioles of the leaves are inserted. When tests are carried out in dark incubators, the sand is kept moist with a 10 percent sucrose solution. In this manner leaves have been kept alive and infection on them followed for 30 days. To avoid continuous moisture occurring on leaves in closed Petri dishes, "L" shaped tubes have been designed, into the horizontal end of which either a petiole or small branch is inserted. Water, nutrient solution, or 10 percent sucrose solution is supplied from the top of the tube. Ribes leaves have remained alive up to 60 days in this way. With Pinus spp. the "L" shaped tubes have proved more satisfactory than Petri dishes for small twigs containing several fascicles of needles. Pinus lambertiana twigs are still living after 6 months. For single fascicles of needles, 2 mm. of the end of the fascicle is inserted into water agar in small glass vials. These needles are still living after 6 months.